

What is claimed is:

1. A system for binding commands between a source and a target comprising a data binding engine that receives at least one binding statement mapping a command to an element of the target, evaluates the at least one binding statement and updates the target element to a value associated with the command.
2. The system of claim 1, wherein the command is a command object.
3. The system of claim 1, wherein the command is associated with state.
4. The system of claim 3, wherein the command state is derived from the source.
5. The system of claim 3, where the command state is associated with an ability to be executed.
6. The system of claim 3, where the command state is associated with an inability to be executed.
7. The system of claim 1, wherein the command is stateless.
8. The system of claim 1, wherein the command is a method.
9. The system of claim 1, wherein the at least one binding statement comprises a statement in a declarative markup language.
10. The system of claim 9, wherein the declarative markup language comprises HTML, XML or XAML.
11. The system of claim 1, wherein the at least one binding statement comprises an indication of a data source.
12. The system of claim 1, wherein the at least one binding statement comprises a binding path.

13. The system of claim 1, wherein the data binding engine queries into a graph of objects, comprising at least a first object and a second object wherein the first object points to the second object.
14. The system of claim 13, wherein the second object is a command object.
15. The system of claim 1, wherein the command comprises an object associated with an executable method and a Boolean state associated with an ability or inability of an execution method associated with the command object to be executed.
16. The system of claim 1, wherein the target is a user interface.
17. The system of claim 1, wherein the source comprises a collection of state of an underlying application.
18. A method of mapping a command to a target comprising:

receiving at least one binding statement that defines a mapping between the command and the target;

determining a value of the command; and

updating the target to the value of the command.
19. The method of claim 18, wherein in response to determining that the at least one binding statement fails to evaluate, the value of the command is set to null.
20. The method of claim 18, wherein in response to determining that the at least one binding statement fails to evaluate, the value of the command is set to a default value.
21. The method of claim 18, wherein in response to determining that the value of the command is null, the target is disabled.
22. The method of claim 18, wherein the command is an object associated with state.
23. The method of claim 22, wherein the command state is derived from a data source.

24. The method of claim 22, wherein the command state is associated with an ability to be executed.
25. The method of claim 18, wherein the command is stateless.
26. The method of claim 18, wherein the command is a method.
27. The method of claim 18, further comprising monitoring a collection of objects comprising a data source for a change notification.
28. The method of claim 27, further comprising in response to detecting the change notification, querying into a graph of objects of the data source to determine an updated value of the command.
29. The method of claim 28, further comprising updating the target mapped to the command to the updated value of the command.
30. The method of claim 18, wherein the at least one binding statement comprises a declarative statement in a markup language.
31. The method of claim 30, wherein the markup language is HTML.
32. The method of claim 30, wherein the markup language is XML.
33. The method of claim 30, wherein the markup language is XAML.
34. The method of claim 18, wherein the target is an element of a user interface.
35. *Charles Wang Pg. 5 [0022]*
A computer-readable medium comprising computer-executable instructions for:

receiving at least one binding statement that defines a mapping between a command of a data source and an element of a user interface;

determining a value for the command; and

updating the element of the user interface to the value of the command.

36. The computer-readable medium of claim 35, comprising further computer-executable instructions for monitoring a collection of objects comprising the data source for a change notification.

37. The computer-readable medium of claim 36, comprising further computer-executable instructions for:

detecting the change notification; and

querying into a graph of objects of the data source to determine an updated value of the command.

38. The computer-readable medium of claim 37, comprising further computer-executable instructions for updating the user interface element associated with the command to the updated value of the command.